WHAT IS CLAIMED IS:

1. A protein comprising an amino acid sequence represented by SEQ ID NO: 1 or 2 or an amino acid sequence having said amino acid sequence with a single or plural amino acids deleted, replaced or added, and having the nicotianamine aminotransferase activity.

2. A gene encoding the protein as defined in claim 1.

3. The gene according to claim 2, which has a nucleotide sequence encoding the amino acid sequence represented by SEQ ID NO: 2 or 4.

4. The gene according to claim 3, which has a nucleotide nucleotide sequence represented by SEQ ID NO: 1 or 3.

5. A plasmid comprising the gene as defined in claim 2.

6. An expression plasmid comprising:

(1) a promoter capable of functioning in a host cell,

(2) the gene as defined in claim 2 and

(3) a terminator capable of functioning in a host cell, operably in the above described order.

7. A process for constructing an expression plasmid, which comprises combining:

(1) a promoter capable of functioning in a host cell,

(2) the gene as defined in claim 2 and

(3) a terminator capable of functioning in a host cell,

operably in the above described order.

8. A transformant comprising a host cell harboring the plasmid as defined in claim 5 or 6.

9. The transformant according to claim 8, wherein the host is a microorganism.

10. The transformant according to claim 8, wherein the host cell is a plant cell.

Sub D2 11. A process for enhancing iron absorbing ability of a host cell, which comprises introducing into a host cell an expression plasmid formed by combining (1) a promoter capable of functioning in a host cell, (2) a nicotianamine aminotransferase gene and (3) a terminator capable of functioning in a host cell, operably in the above described order and transforming said host cell.

12. The process according to claim 11, wherein the host cell is a plant cell.

Sub D3 13. The process according to claim 12, wherein the gene of the nicotianamine aminotransferase is the gene as defined in claim 2.

14. A gene fragment having a partial sequence of the gene as defined in claim 2, 3 or 4.

15. The gene fragment according to claim 14, wherein the number of the base is 15 or more and 50 or less.

16. The gene fragment according to claim 14, which has

the nucleotide sequence represented by SEQ ID NO: 5.

17. A process for detecting a nicotianamine aminotransferase gene, which comprises detecting from plant gene fragments a nicotianamine aminotransferase gene having a nucleotide sequence encoding an amino acid sequence of an enzyme with the nicotianamine aminotransferase activity or a gene fragment thereof by applying the hybridization method using the gene fragment as defined in ~~claim 14, 15 or 16~~ claim 14.

18. A process for amplifying a nicotianamine aminotransferase gene, which comprises amplifying a nicotianamine aminotransferase gene having a nucleotide sequence encoding an amino acid sequence of an enzyme with the nicotianamine aminotransferase activity or a gene fragment thereof by applying PCR (polymerase chain reaction) on a plant gene fragment using the gene fragment as defined in ~~claim 14, 15 or 16~~ claim 14 as a primer.

19. A process for obtaining a nicotianamine aminotransferase gene, which comprises identifying a nicotianamine aminotransferase gene or a gene fragment thereof by the process as defined in ~~claim 17 or 18~~ claim 17, and isolating and purifying the identified gene or the gene fragment thereof.

20. A nicotianamine aminotransferase gene obtained by

the process as defined in claim 19.

add A5